Amendments to the Claims

Please amend the claims as follows:

Claims 1-13 (withdrawn).

Claim 14 (currently amended): A method of determining the presence and extent of axonal damage in the head of a patient suspected of having ~~traumatic head injury~~ suffered a neurologic trauma selected from acute cerebral vascular accident, primary neuronal injuries, primary hemorrhages, primary vascular injuries or secondary traumatic lesions, said method comprising the steps:

(a) obtaining a sample of cerebrospinal fluid from said patient;

(b) treating said sample of cerebrospinal fluid with at least one monoclonal antibody, said at least one monoclonal antibody having been raised against an axonally-derived tau protein of SEQ ID NO:1;

(c) detecting the presence of said axonally-derived tau protein bound to said at least one monoclonal antibody; and

(d) comparing the amount of said axonally-derived tau protein bound to said at least one monoclonal antibody in step (c) to control samples from the group representing a normal undamaged axon state and those representing an axonal damage state.

Claims 15-16 (canceled).

Claim 17 (previously amended): A method according to Claim 14 wherein said axonally-derived tau protein is a fragment of said tau protein of SEQ ID NO:1 demonstrating an apparent molecular weight in the range of 30 kDa to 50 kDa.

Claim 18 (canceled).

Claim 19 (previously amended): A method according to Claim 17 wherein said axonally-derived protein comprises the sequence from serine^{199} to serine^{396} of tau protein of SEQ ID NO: 1.

Claim 20 (canceled).

Claims 21-22 (withdrawn).

Claim 23 (original): A method according to claim 14 wherein said presence of said axonally-derived protein bound to said at least one monoclonal antibody is detected through gel electrophoresis.

Claim 24 (previously amended): A method according to Claim 23 wherein said axonally-derived tau protein bound to said at least one monoclonal antibody is a fragment of tau protein SEQ ID NO:1 which is detected through gel electrophoresis and which gives rise to an electrophoresis gel demonstrating multiple protein bands with apparent molecular weights from 30 kDa to 50 kDa.

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Claim 25 (canceled).

Claim 26 (original): A method according to claim 14 further comprising the measurement of said axonally derived proteins in said cerebrospinal fluid by an ELISA technique.

Claim 27 (previously amended): The method of Claim 26 wherein the ELISA employs monoclonal antibodies recognizing tau protein of SEQ ID NO: 1 present in human cerebrospinal fluid.

Claim 28 (canceled).

Claim 29 (original): The method of claim 26 wherein said ELISA is a tau sandwich ELISA.

Claims 30-31 (canceled).

Claim 32 (currently amended): A method of determining the presence and extent of axonal damage in the head of a patient suspected of having ~~a~~ an acute cerebrovascular accident, said method comprising the steps of:

(e) obtaining a sample of cerebrospinal fluid from said patient;

(f) treating said sample of cerebrospinal fluid with at least one monoclonal antibody, said at least one monoclonal antibody having been raised against an axonally-derived tau protein of SEQ ID NO:1;

(g) detecting the presence of said axonally-derived tau protein bound to said at least one monoclonal antibody; and

comparing the amount of said axonally-derived tau protein bound to said at least one monoclonal antibody in step (c) to control samples from the group representing a normal undamaged axon state and those representing an axonal damage state.

Claim 33 (currently amended): The method according to claim 14 wherein the ~~traumatic head injury~~ neurologic trauma is selected from ~~primary hemorrhages, primary vascular injuries, traumatic lesions, and acute cerebral vascular accident~~ primary neuronal injuries and secondary traumatic lesions.